NO. 578 P. 4 Atty Docker No. 145934.00005 Appln. No.: 09/820.662

IN THE CLAIMS

Please cancel Claims 30 Claims 31 to 37 without prejudice.

- 1) (Currently amended) A system for searching data, a bioinformatics data collection, said the system comprising:
- a) an organizer configured to receive search requests, said organizer comprising:
- b) a bioinformatics data collection having at least two entries;
- c) wherein the bioinformatics data collection is organized into at least two taxonomies;
- d) wherein each of the at least two taxonomies is associated with at least two categories;
- e) wherein the entries correspond to at least one of the at least two taxonomies and also correspond to at least one of the at least two categories; and
- f) a search engine in communication with the organizer the electronic product catalog.
- g) wherein said the search engine is configured to search based on the at least two taxonomies and based on the at least two categories,
- h) wherein the search engine returns, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the at least first identified taxonomies, along with the number of entries associated with each of the categories associated with the at least first identified taxonomies.



2) (Original) The system according to claim 1, wherein the returned list of categories associated with the at least one first taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies can be further searched with regard to at least a second taxonomy of the at least two taxonomies, whereby the search engine returns, in response to a search request identifying the at least second taxonomies of the at least two taxonomies, a list of the categories associated with both identified taxonomies, along with the number of entries associated with each of the categories associated with the second taxonomies.

3) (Original) The system according to claim 1, wherein the search engine, having returned, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies, will provide only those categories with a non-zero number of entries associated with the identified taxonomies and will further return sub-categories both associated with the category and having a non-zero number of entries associated with the sub-category.

4) (Original) The system according to claim 3, wherein the search engine, having further returned sub-categories both associated with the category and having a non-zero number of entries associated with the sub-category, will, in response to a search request identifying at least a second taxonomy of the at least two taxonomies, provide a list of the categories with a non-zero number of entries associated with the at least second identified taxonomies, along with the number of entries associated with each of the categories associated with the at least second identified taxonomies.

Appln. No.: 09/820,662

5) (Original) The system according to claim 1, wherein the search engine, having returned, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies, will, in response to a string query, provide those entries which both contain the string and are associated with the identified taxonomies.

- 6) (Original) The system according to claim 5, wherein the string is one member of the group consisting of text, image, and graphic.
- 7) (Original) The system according to claim 1, wherein the system comprises a network of computers.
- 8) (Original) The system according to claim 1, wherein the system comprises a single computer.
- 9) (Original) The system according to claim 1, wherein the system further comprises a cache which stores the returned results of the search engine for rapid retrieval.
- 10) (Currently amended) The system for searching data an electronic product catalog according to claim 1, wherein at least one taxonomy of the at least two taxonomies is selected from the group consisting of organism, biological process, molecular function, species, and cellular component.



NO. 578 P. 7 Atty Docker 140. 145934.00005

Appln. No.: 09/820,662

- 11) (Currently Amended) A system for searching data a bioinformatics collection, said the system comprising:
- a) means for networking a plurality of computers;
- b) and means for organizing executing in said computer network and configured to receive search requests from any one of said plurality of computers, said means for organizing comprising:
- c) a bioinformatics collection having at least two entries;
- d) wherein said the bioinformatics collection is organized into at least two taxonomies;
- e) wherein each of the at least two taxonomies is associated with at least two categories;
- f) wherein the entries correspond to at least one of the at least two taxonomies and also correspond to at least one of the at least two categories;
- g) and means for searching in communication with the <u>said</u> bioinformatics collection, wherein said means for searching is configured to search based on the at least two taxonomies and based on the at least two categories, wherein the means for searching returns, in response to a search request identifying at least one of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies.



NO. 578 P. 8 Atty Docker No. 145934,00005 Appln. No.: 09/820,662

12) (Original)The system according to claim 11, wherein the returned list of categories associated with the at least first taxonomy, along with the number of entries associated with each of the categories associated with the identified taxonomies can be further searched with regard to at least a second of the at least two taxonomies, whereby the means for searching returns, in response to a search request identifying the at least second taxonomy of the at least two taxonomies, a list of the categories associated with all identified taxonomies, along with the number of entries associated with each of the categories associated with the at least second taxonomy.

BI

13) (Original) The system according to claim 11, wherein the means for searching, having returned, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies, will provide only those categories with a non-zero number of entries associated with the identified taxonomies and will further provide sub-categories associated with the category and having a non-zero number of entries associated with the sub-category.

14) (Currently amended) The system for searching an electronic product catalog according to claim 11, wherein the means for searching, having further returned sub-categories both associated with the category and having a non-zero number of entries associated with the sub-category, will, in response to a search request identifying at least a second taxonomy of the at least two taxonomies, provide a list of the categories with a non-zero number of entries associated with the at least second identified taxonomy, along with the number of entries associated with each of the categories associated with the at least second identified taxonomy.

14.) 15.) (Currently Amended) The system according to claim 13, wherein the means for searching, having returned, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies, will, in response to a string query, provide those entries which both contain the string and are associated with the identified taxonomies.

- 15) 16) (Currently Amended) The system according to claim 5 11, wherein the string is one member of the group consisting of text, image, and graphic.
- 16) 17) (Currently Amended) The system according to claim 11, wherein the system comprises a network of computers.
- 17) 18) (Currently Amended) The system according to claim 11, wherein the system comprises a single computer.

NO. 5/8 P. 10
Atty Docket 190. 145934.00005
Apple No. 09/820 662

Appln. No.: 09/820,662

- 18) 19) (Currently Amended) The system according to claim 11, wherein the system further comprises a cache which stores the returned results of the means for searching for rapid retrieval.
- 19) 20) (Currently Amended) The system according to claim 11, wherein at least one taxonomy of the at least two taxonomies is selected from the group consisting of organism, biological process, molecular function, species, and cellular component.
- 20) 21) (Currently Amended) A method for searching a bioinformatics collection, said method comprising:
- a) communicating a search request to a search engine, the search engine being in
 communication with a the bioinformatics collection;
- b) wherein the bioinformatics collection has at least two entries;
- c) wherein the bioinformatics collection is organized into at least two taxonomies:
- d) wherein each of the at least two taxonomies is associated with at least two categories;
- e) wherein the at least two entries correspond to at least one of the at least two taxonomies

 and also correspond to at least one of the at least two categories;
- f) querying of the bioinformatics collection by the search engine based on the communicated search request;
- g) wherein the communicated search request identifies at least one of the at least two taxonomies; 13



NO. 5/8 F. 11
Atty Docker Ivo. 145934.00005
Appln. No.: 09/820.662

h) returning of a list of the categories associated with the at least one identified taxonomy, along with the number of entries associated with each of the categories associated with the at least one identified taxonomy as a response to the querying of the bioinformatics collection.

21) 22) (Currently Amended) The method according to claim 20, wherein the method further comprises returning, in response to a search request identifying at least a second taxonomy of the at least two taxonomies, a list of the categories associated with all identified taxonomies, along with the number of entries associated with each of the categories associated with the at least second taxonomy.

22) 23) (Currently Amended) The method according to claim 20, wherein the method further comprises returning a list of only those categories with a non-zero number of entries associated with the identified taxonomies and further returning at least one sub-category associated with the category and having a non-zero number of entries associated with the sub-category.

23) 24) (Currently Amended) The method according to claim 22, wherein the method further comprises having further returned sub-categories both associated with the category and having a non-zero number of entries associated with the sub-category, providing, in response to a search request identifying at least a second taxonomy of the at least two taxonomies, provide a list of the categories with a non-zero number of entries associated with the at least second identified taxonomy, along with the number of entries associated with each of the categories associated with the at least second identified taxonomy.



NO. 578 P. 12 Atty Docker 190. 145934.00005 Appln. No.: 09/820,662

24) 25) (Currently Amended) The method according to claim 20, wherein the method further comprises returning, in response to a string query, provide those entries which both contain the string and are associated with the identified taxonomy.

25) 26) (Currently Amended) The method according to claim 24, wherein the string is one member of the group consisting of text, image, and graphic.

26) 27) (Currently Amended) The method according to claim 20, wherein the system comprises a network of computers.

27) 28) (Currently Amended) The method according to claim 20, wherein the system comprises a single computer.

28) 29) (Currently Amended) The method according to claim 20, wherein the system further comprises a cache which stores the returned results of the means for searching for rapid retrieval.

29) 30) (Currently Amended) The method according to claim 25, wherein at least one taxonomy of the at least two taxonomies is selected from the group consisting of organism, biological process, molecular function, species, and cellular component.

- 31) (Cancel)
- 32) (Cancel)
- 33) (Cancel)
- 34) (Cancel)
- 35) (Cancel)

NO. 578 P. 13 Atty Docker 140, 145934,00005 Appln. No.: 09/820,662

36) (Cancel)

37) (Cancel)